



UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/581,758 06/16/00 HOKASE

M 1241.15

EXAMINER

HM12/0717

FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK NY 10112-3801

MELLER, M

ART UNIT

PAPER NUMBER

1651

DATE MAILED:

07/17/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/581,758

Applicant(s)

HOKASE, MASANOBU

Examiner

Michael V. Meller

Art Unit

1651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL.
- 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 June 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3 and 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2, the phrase, "the dry feed matter" has no antecedent basis from claim

1.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Edwards, Jr (Edwards).

Edwards teaches administering a feed composition containing phytase to a mammal, see abstract, col. 6, lines 25-34, the tables and the claims. Since the claims are drawn to administering phytase to a mammal and the mammal is not defined as suffering from mastitis, the claims are anticipated by the reference. Edwards also teaches that the feed composition is made up of minerals, proteins, amino acids, vitamins, etc. which is what a formula feed is, see col. 7, line 55-col. 8, line 17.

Claim 4 is rejected under 35 U.S.C. 102(b) as being anticipated by WO 93/16175.

The reference teaches that phytase is in a feed preparation, see abstract, page 3, lines 13-20. Since the claim only requires phytase, the claim is anticipated by the reference.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edwards, Jr. (Edwards) in view of WO 93/16175 (WO), Bedford et al. (Bedford), Lyons and CN 1135297 (CN)- relying on the abstract only.

Edwards teaches administering a feed composition containing phytase to a mammal, see abstract, col. 6, lines 25-34, the tables and the claims. It is noted that the claims are drawn to administering phytase to a mammal and that the mammal is not defined as suffering from mastitis. Edwards also teaches that the feed composition is made up of minerals, proteins, amino acids, vitamins, etc. which are what a formula feed is, see col. 7, line 55-col. 8, line 17. Edwards does not teach that the phytase is used in an amount of from 50 to 5,000 units per kg of dry feed matter, that the mammal is a cow, that the formula feed is for dairy cows and that the feed further contains zinc methionine sulfate.

WO teaches that phytase can be advantageously applied to the feeds of animals, see abstract, page 2, lines 13-16, page 3, lines 13-20, . WO further teaches that phytase can be added to those feeds in an amount of from 100-600 units per kg of feed, see page 7, lines 18-30.

Bedford teaches that a feed containing enzymes such as phytase is administered to animals such as cows, see col. 8, lines 16-19, col. 10, lines 38-40, examples, col. 16, lines 22-25.

Lyons teaches that phytase is routinely used in feeds for consumption by animals and that zinc is commonly used in feeds to treat mastitis, see table 3, page 5, last paragraph, page 7, last paragraph, figure 3, page 20, whole page, and table 17.

CN teaches that zinc methionine sulfate is commonly used as a feed additive for animals, see abstract.

It would have been obvious to one of ordinary skill in the art to use the claimed amount of phytase since such an amount is well known in the art as is evidenced by WO and since one of ordinary skill in the art would have been motivated to use such an amount to optimize the desired results. Since Bedford teaches that a feed containing phytase can be given to cows, it further would have been obvious to give the claimed feed to cows since it is well within the purview of the skilled artisan's knowledge that feeds containing phytases are given to cows. Further, since Edwards teaches a formula feed and since Bedford teaches that such feeds can be given to cows, it would have been obvious to make a formula feed for dairy cows since one would want to provide as much nutritional effects to the dairy cows since they provide such an important resource as milk. Also, applicants admit on page 5, bottom paragraph of their specification, that such formula feeds are known to be made by well known methods. To add zinc methionine sulfate to the feed also would have been obvious since CN establishes that zinc methionine sulfate is routinely given to animals in their feed and since Lyons teaches that mastitis is treated using zinc, thus to specifically use zinc methionine sulfate, would have been obvious since one would have been motivated to use a zinc compound in an effort to treat mastitis.

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of

Application/Control Number: 09/581,758
Art Unit: 1651

Page 6

ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Allowable Subject Matter

If applicant amends claim 1 to require that "the mammal suffers from mastitis", then the process claims (claims 1-3) would be allowable over the cited art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael V. Meller whose telephone number is 703-308-4230. The examiner can normally be reached on Monday thru Friday: 10:30am-7:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Wityshyn can be reached on 703-308-4743. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-0294 for regular communications and 703-308-0294 for After Final communications.

Application/Control Number: 09/581,758
Art Unit: 1651

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

A handwritten signature in black ink, appearing to read 'M. Meller', followed by a long horizontal line extending to the right.

Michael Meller
Patent Examiner
Art Unit 1651

MVM

July 13, 2001